

Amendments to the Claims:

Claims 8 and 9 are amended as set forth hereinafter. Claims 10 and 11 have been added.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 to 6 (Cancelled).

7. (Withdrawn) A method for detecting combustion misfires in an internal combustion engine, the method comprising the steps of:

determining whether engine rpm (n) and engine load (L) lie in a segment length (L1);

5       if yes, then forming segment time (ts) having a first segment length (1) and, if no, then forming segment time (ts) having a second segment length (2);

determining whether engine rpm (n) and engine load (L) lie in a segment start (1);

10       if yes, then forming a segment time (ts) having a segment start (1) and, if no, then forming a segment time (ts) having a segment start (2);

determining if segment time (ts) is greater than a threshold; and,

15       if yes, then switching on a fault lamp indicating the presence of a misfire.

8. (Currently Amended) A method for detecting combustion misfires in an internal combustion engine, the method comprising the steps of:

5 considering the position of ~~angular~~ angle segments relative to a reference point (TDC) of the movement of the piston of the engine ~~which are~~ wherein said position is dependent upon at least one operating parameter of the engine and wherein the one parameter(s) is the engine load and/or the engine rpm;

10 evaluating segment times in which a shaft of the engine passes through said angle segments; and,

detecting said misfires when said segment times exceed a predetermined threshold value.

9. (Currently amended) A method for detecting combustion misfires in an internal combustion engine, the method comprising the steps of:

5 considering the position of ~~angular~~ angle segments relative to a reference point (TDC) of the movement of the piston of the engine ~~which are~~ wherein said position is dependent upon at least one operating parameter of the engine and wherein the one parameter(s) is the engine load and/or the engine rpm;

10 considering an angle expansion of the angle segments; causing the angle expansion of the angle segments to be dependent upon said at least an operating parameter of the engine;

evaluating segment times in which a shaft of the engine passes through said angle segments; and,

15            detecting said misfires when said segment times exceed a predetermined threshold value.

10. (New) A method for detecting combustion misfires in an internal combustion engine, the method comprising the steps of:

          considering the position of angle segments relative to a reference point (TDC) of the movement of the piston of the engine wherein said position is dependent upon at least one operating parameter of the engine and wherein the one parameter(s) is the engine load and/or the engine rpm;

          determining a switchover between several segment lengths and segment positions in dependence of operating points;

          evaluating segment times in which a shaft of the engine passes through said angle segments; and,

          detecting said misfires when said segment times exceed a predetermined threshold value.

11. (New) The method of claim 9, wherein a switchover between several segment lengths and segment positions is determined in dependence of operating points.